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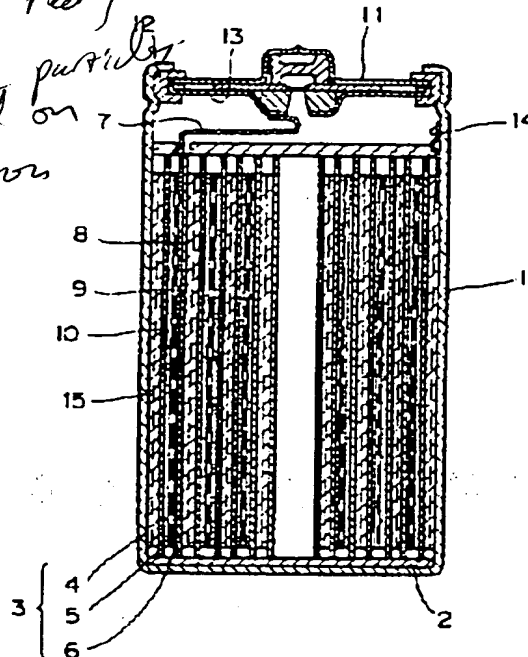
APPLICANT : TOSHIBA BATTERY CO LTD;

INVENTOR : INADA KUNIAKI;

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TITLE : SECONDARY BATTERY

*C/SiO<sub>2</sub> layer on neg. elec*  
*not really*  
*SiO<sub>2</sub> particles*  
*coated on 7*  
*at interface*



**ABSTRACT :** **PURPOSE:** To increase reliability during charge/discharge in a secondary battery, in which an active material is Li or alkaline metal composed mainly of Li, by constituting a negative electrode body especially of a carbonaceous material having specific H/C atomic ratio and crystal structure and an inorganic silicon compound.

**CONSTITUTION:** Li or alkaline metal composed mainly of Li is used as an active material. The chief ingredient of a positive electrode body 6 is transition metal oxide such as MnO<sub>2</sub> or V<sub>2</sub>O<sub>5</sub>, transition metals such, as LiCoO<sub>2</sub> and a compound oxide of alkaline metal. A negative electrode body 4 has a specific structure, and H/C atomic ratio is less than 0.15, and spacing ( $d_{002}$ ) of (002) plane by means of an X-ray wide angle rotation method is 3.37 or more, and size  $L_c$  of crystallite in the C axial direction is 150 or less. A layer of a carbonaceous material containing Si or SiO<sub>2</sub> and/or the like by 0.05-1.2weight% is coated over the surface of the carbonaceous material. According to this constitution, a battery capacity is not reduced so significantly, so that a secondary battery having high reliability during charge/discharge can be obtained.

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